

FIG. 1

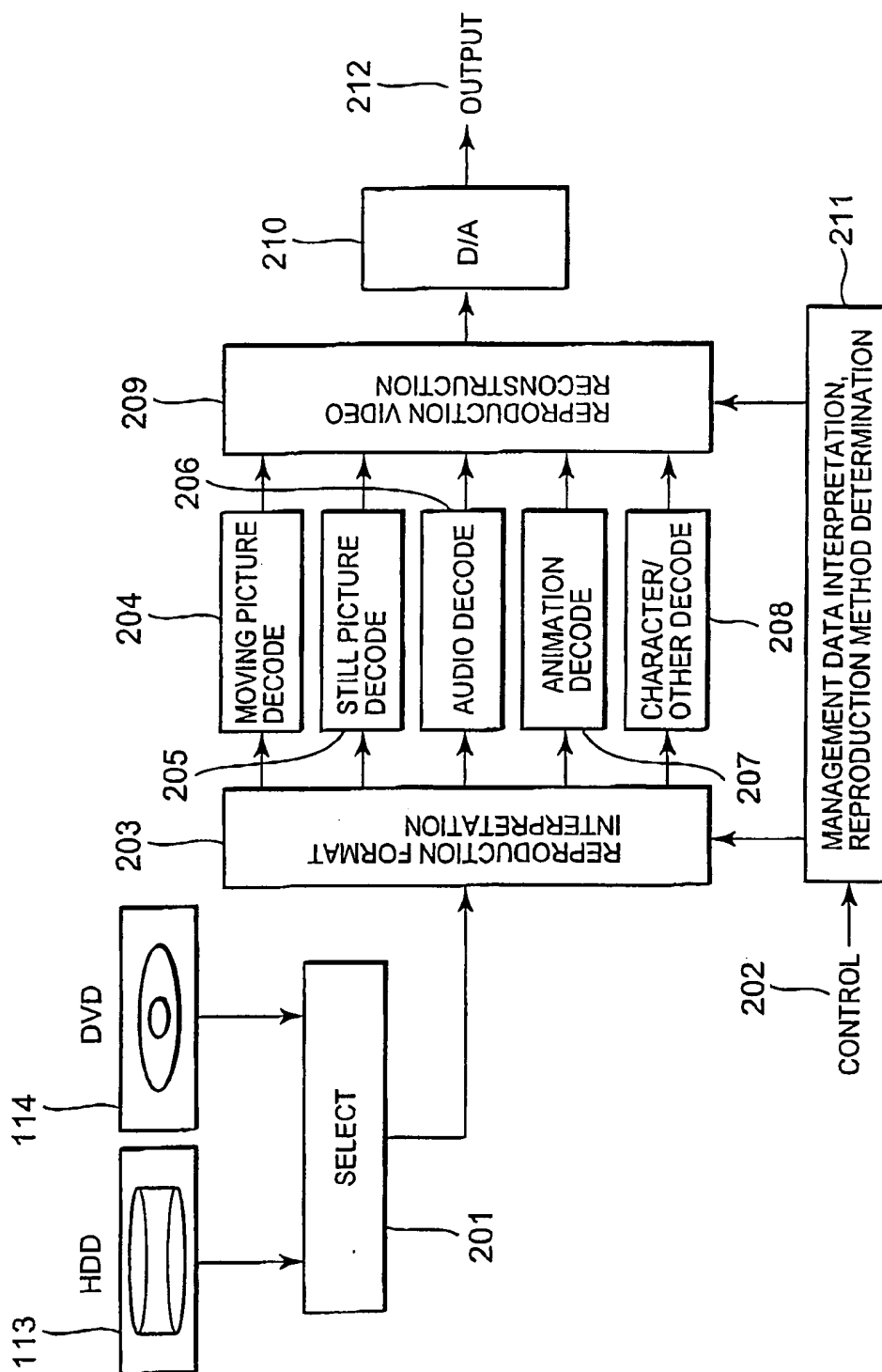


FIG. 2

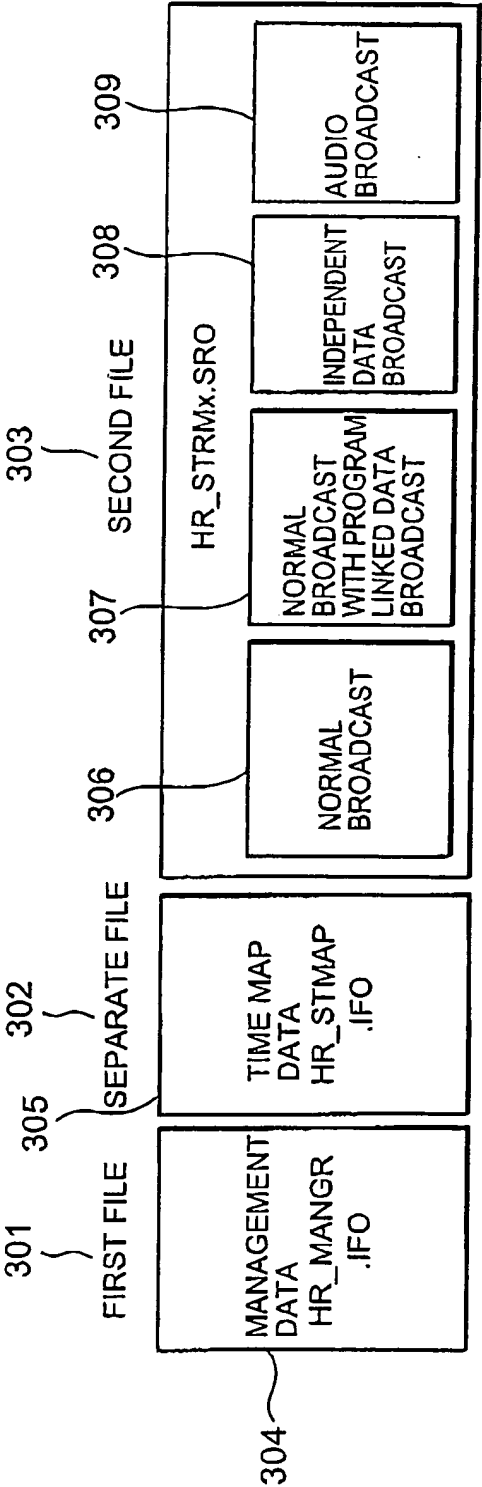


FIG. 3

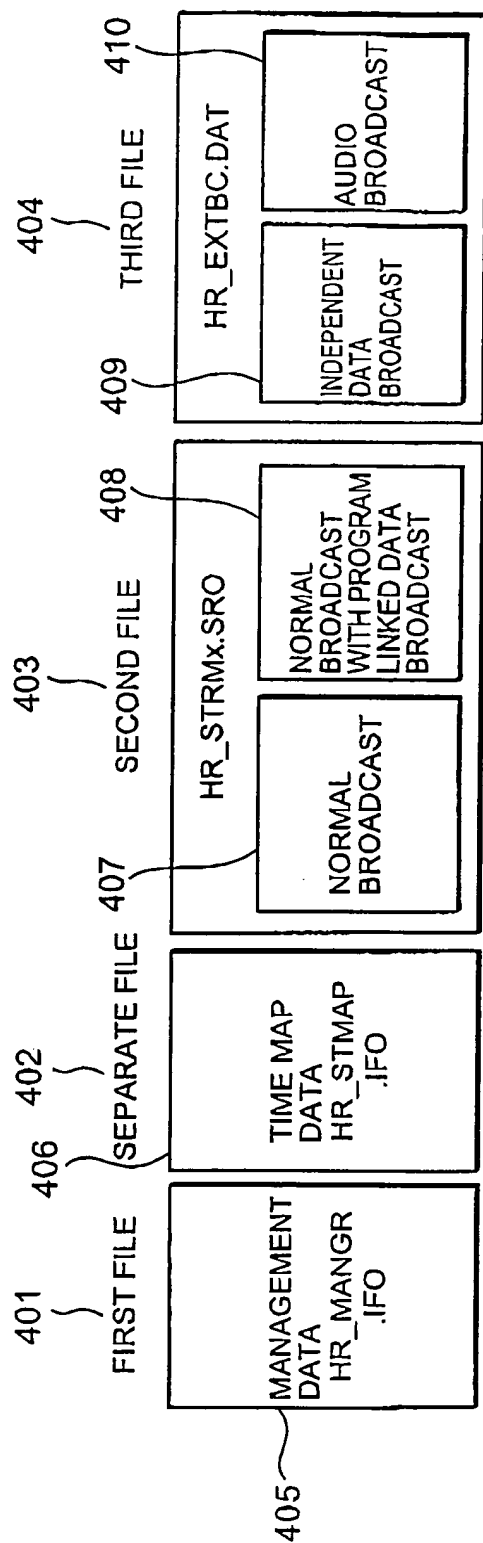


FIG. 4

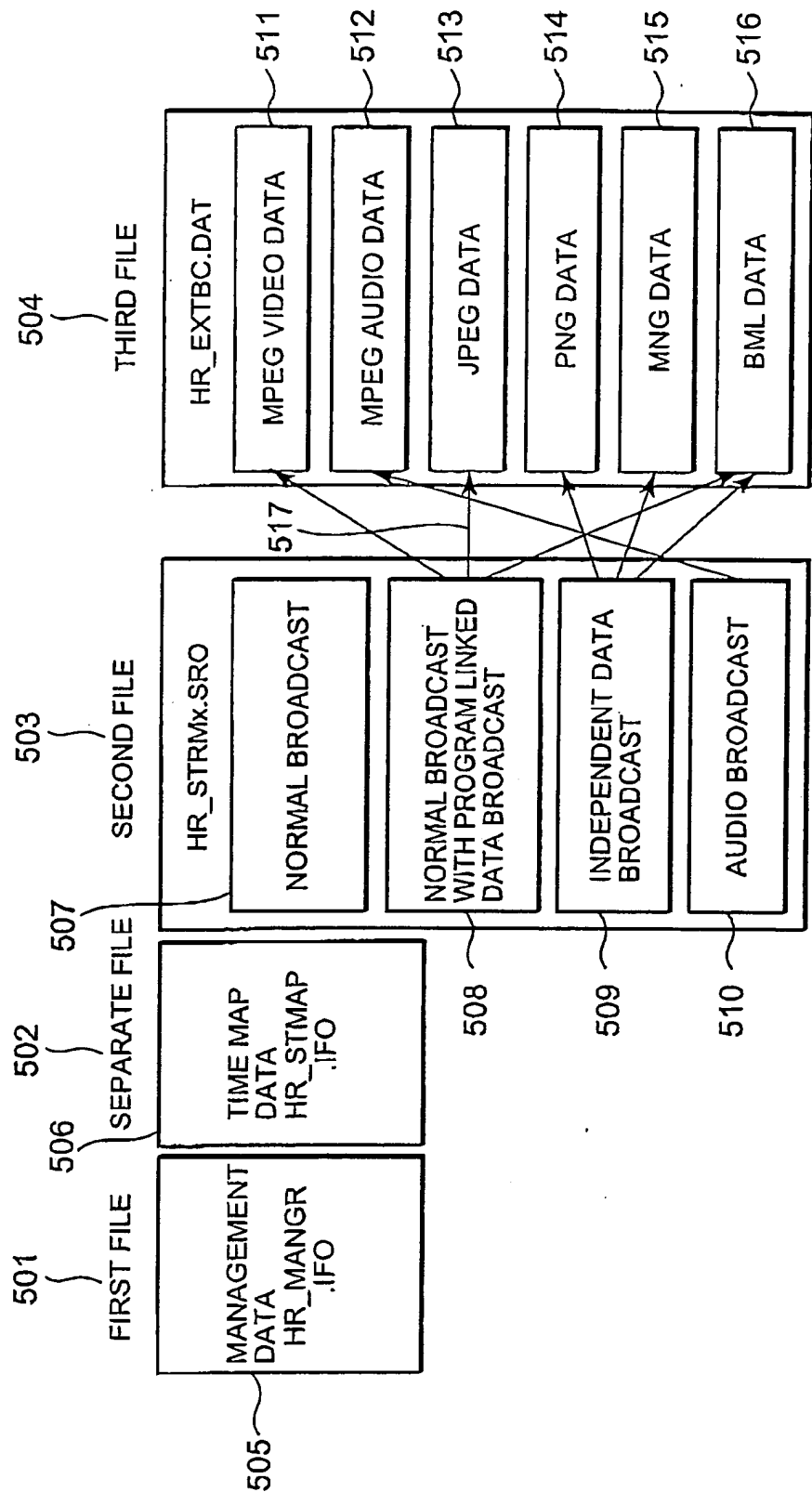


FIG. 5

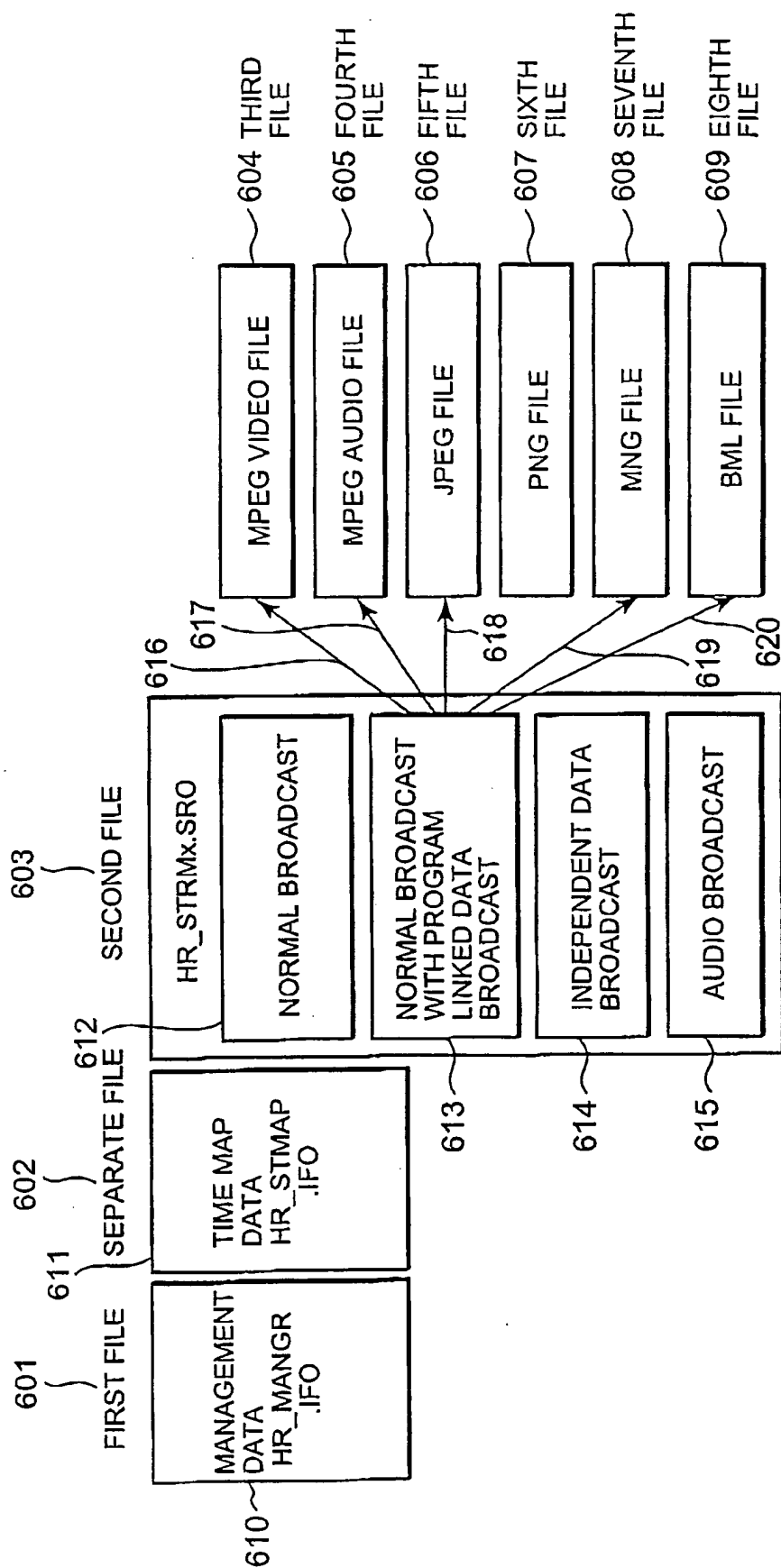


FIG. 6

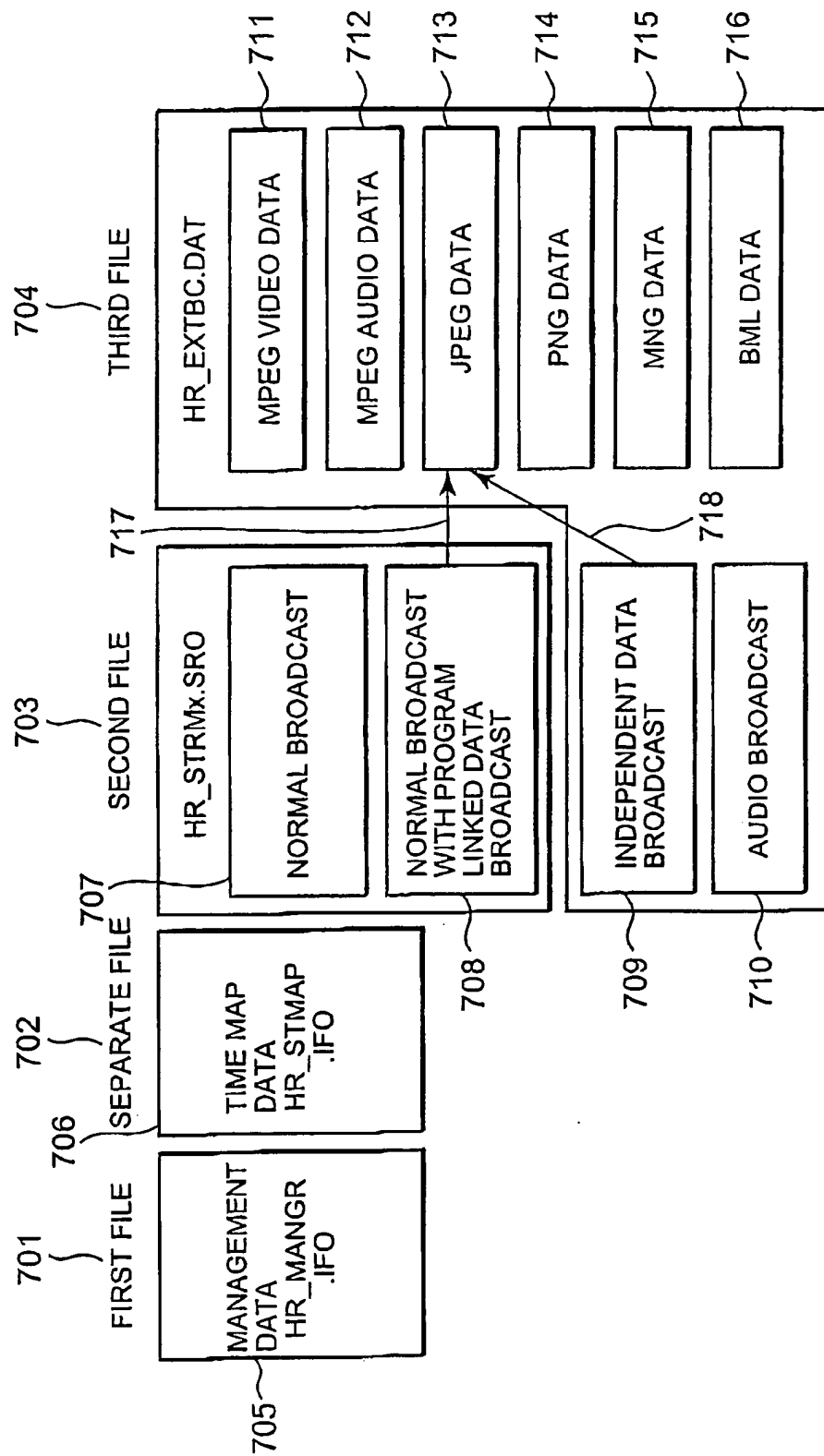


FIG. 7

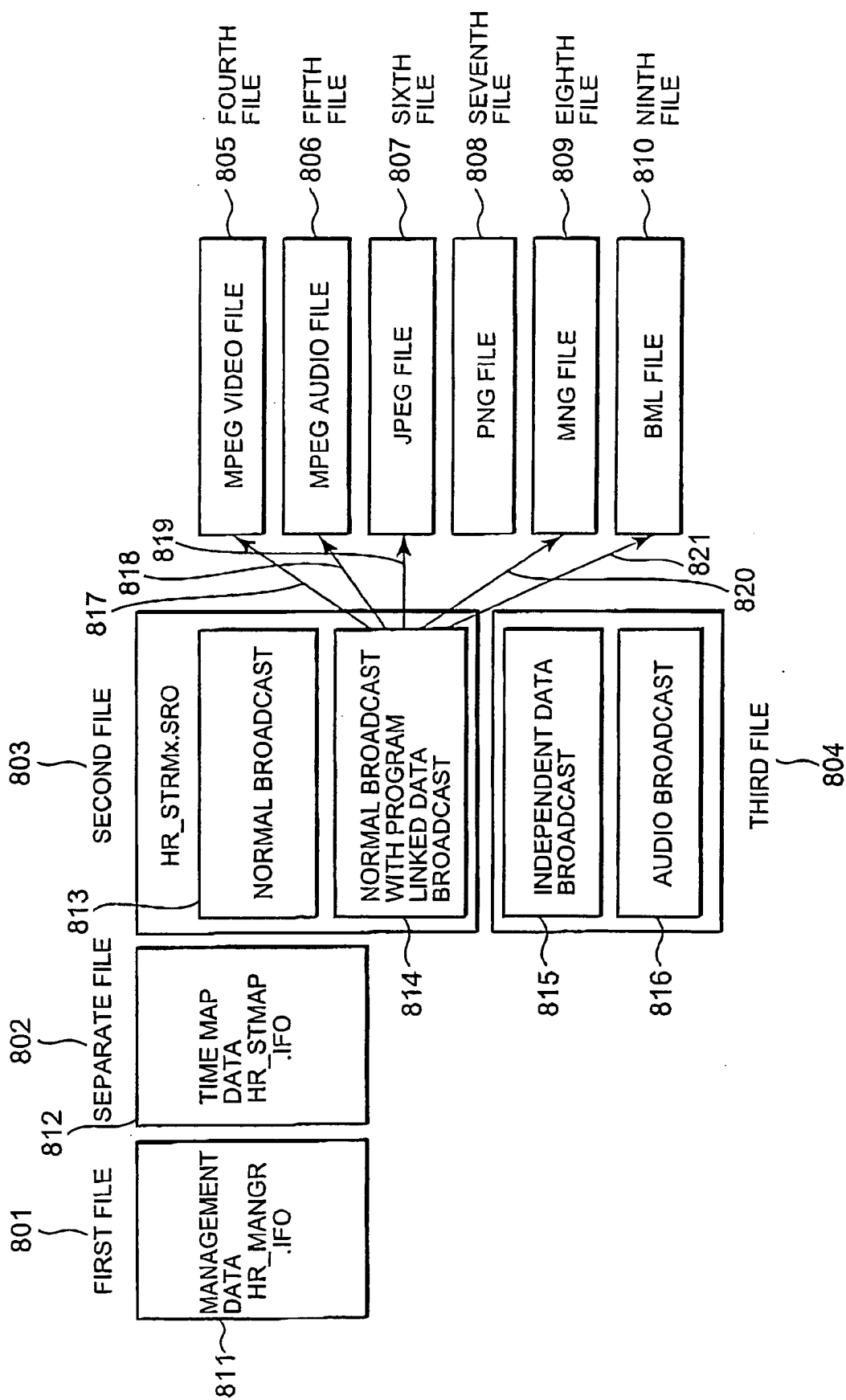


FIG. 8



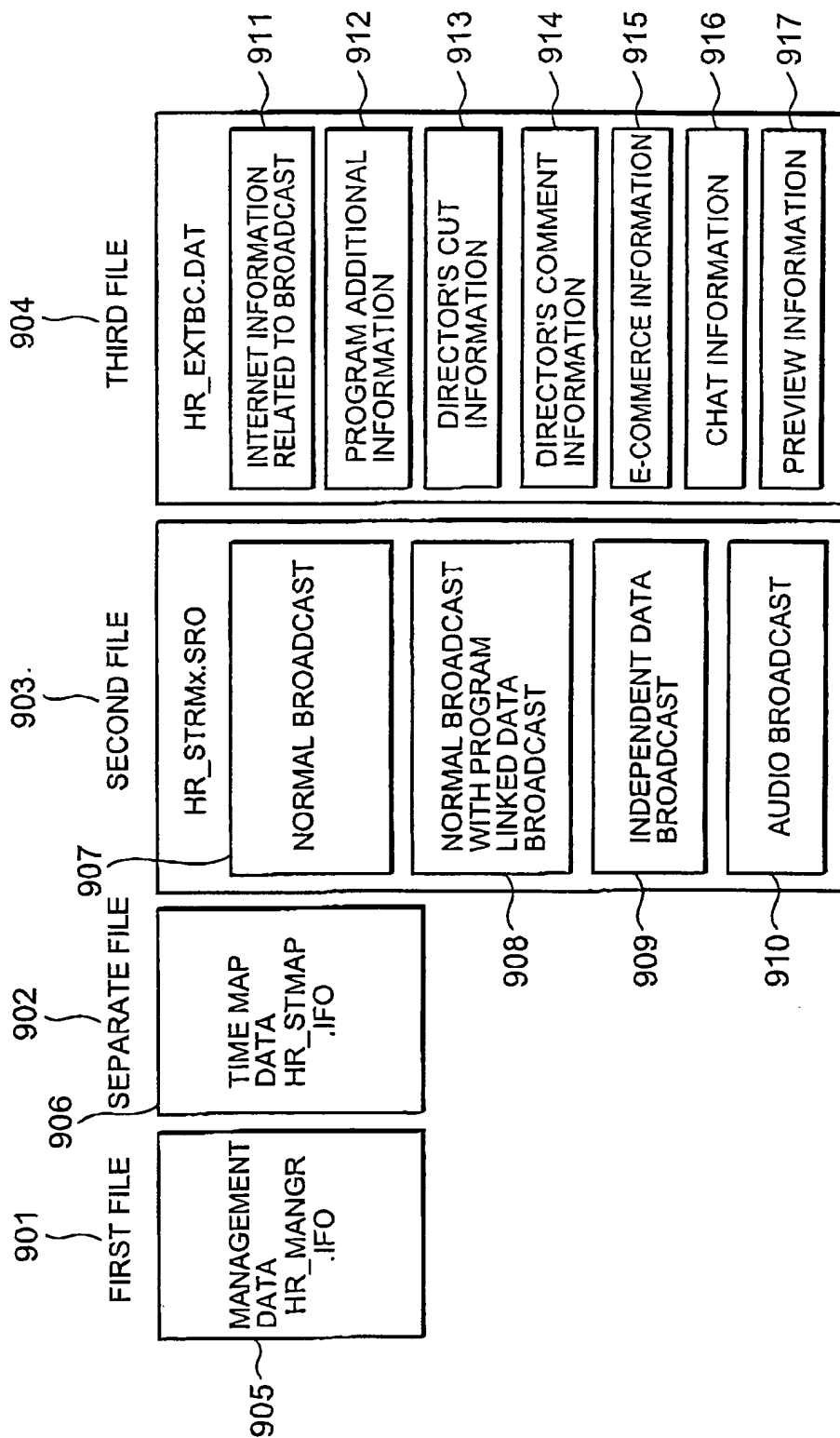


FIG. 9

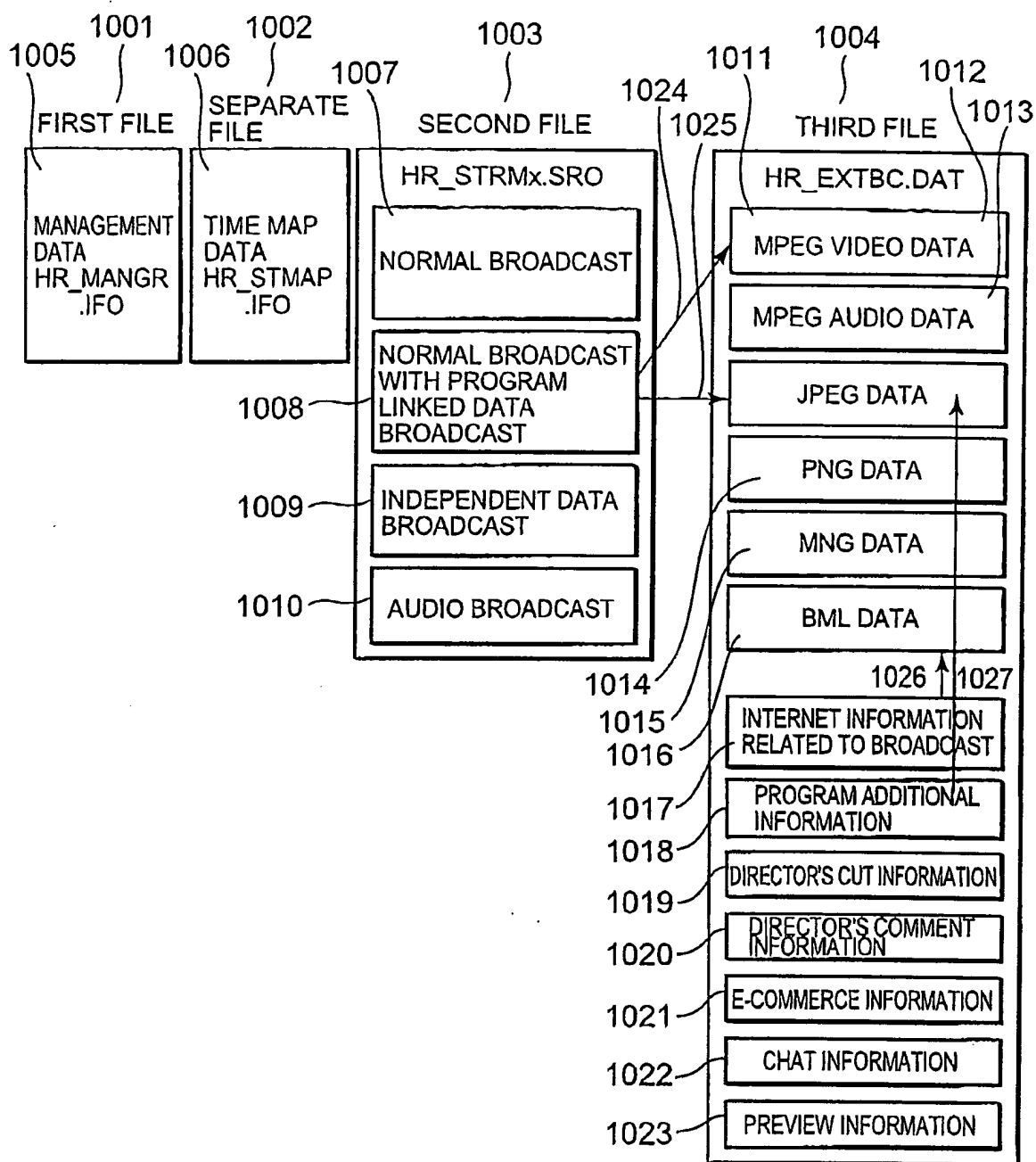


FIG. 10

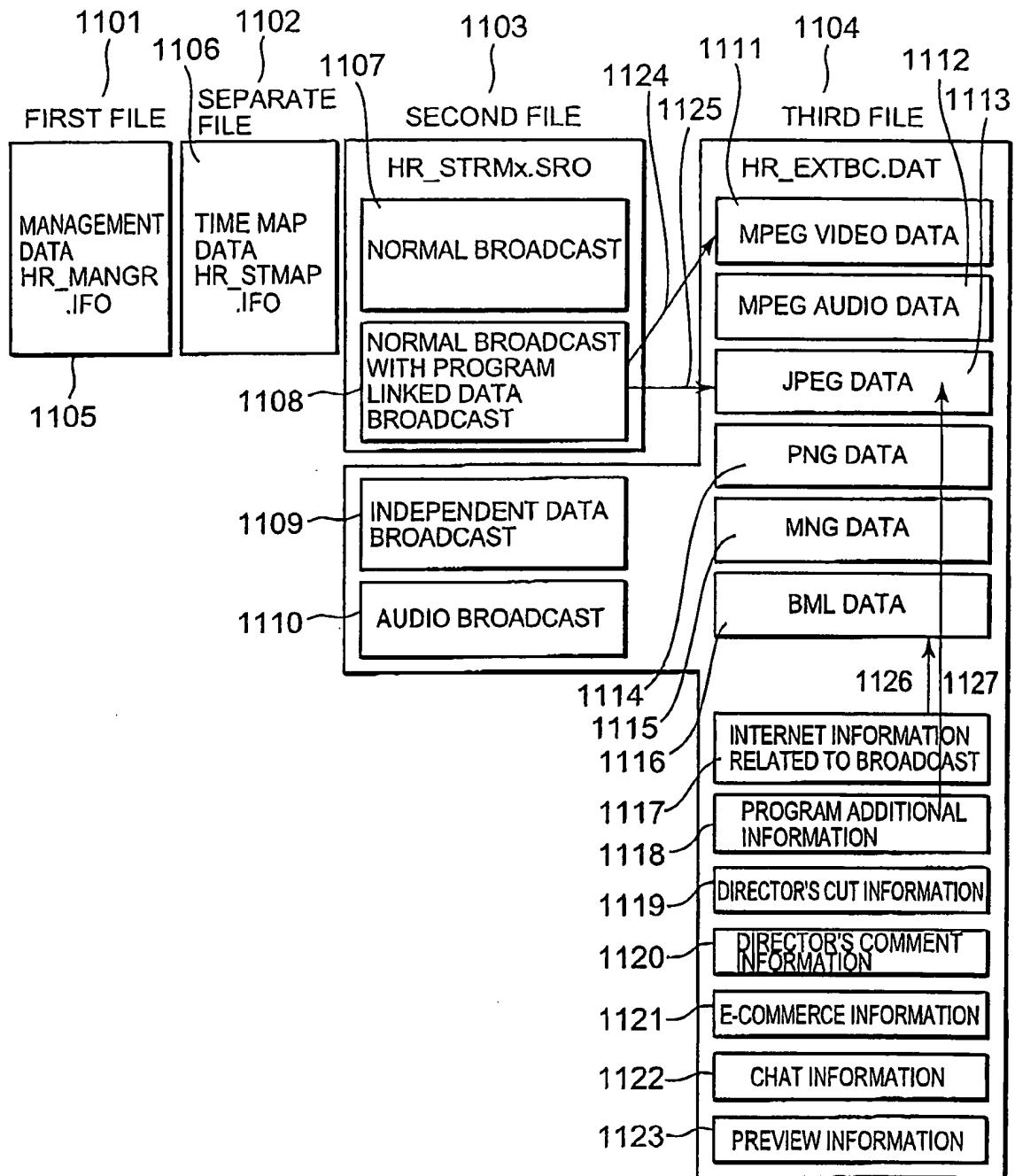


FIG. 11

DVD\_HDVR

HR\_MANGR.IFO

STREAM FILE INFORMATION TABLE (STM\_AVFIT)

STM\_AVFIT INFORMATION

DATA BROADCAST RECORDING FILE ID FLAG (DATA BROADCAST RECORDING FILE ID FLAG)

ZEROTH BIT 0: DATA BROADCAST IS NOT INCLUDED IN HR\_STRMx.SRO, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN HR\_STRMx.SRO,  
1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN HR\_STRMx.SRO, 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN HR\_STRMx.SRO,  
1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA RECORDING FILE ID FLAG (BROADCAST RELATED INFORMATION  
RECORDING FILE ID FLAG)

ZEROTH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN HR\_STRMx.SRO,  
1: INCLUDED

OTHER BIT: RESERVED

SOB STREAM INFORMATION #1 ~ SOB STREAM INFORMATION #n

STM\_ATR

DATA BROADCAST ID FLAG (DATA BROADCAST ID FLAG)

ZEROTH BIT 0: DATA BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN SOB,  
1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA ID FLAG (BROADCAST RELATED INFORMATION ID FLAG)

ZEROTH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN SOB,  
1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA CONTENT (BROADCAST RELATED INFORMATION CONTENT)

00: BROADCAST RELATED INFORMATION IS INTERNET DATA (STREAMING)

01~11: RESERVED

BROADCAST VIDEO MODE

000: MPEG-2, 001: MPEG-1, 010: MPEG-4, 011: H.264, 100: WM9

101~111: RESERVED

BROADCAST AUDIO MODE

000: MPEG-2 AAC, 001: Dolby AC-3, 010: MPEG-1, 011: MPEG-2 BC

100: DTS1, 101: LPCM, 110~111: RESERVED

BROADCAST STILL-PICTURE MODE

000: JPEG, 001: PNG, 010~111: RESERVED

BROADCAST ANIMATION MODE

000: MNG, 001~111: RESERVED

DATA BROADCAST MODE

000: BML, 001~111: RESERVED

DATA TRANSMISSION MODE

FIG. 12A

00: DATA CARROUSEL MODE  
 01: EVENT MESSAGE TRANSMISSION MODE  
 10: TRANSMISSION MODE INCLUDING BOTH MODES  
 11: RESERVED

DATA CARROUSEL AUTO RENEWAL

00: BROADCAST DATA CARROUSEL ALL DATA RECORDING MODE  
 01: SELECTED RECORDING MODE FOR RENEWAL DATA IN BROADCAST DATA CARROUSEL  
 10~11: RESERVED

REFRESH FLAG

00: OLD DATA AUTO REFRESH OFF WITH NEW DATA IN NEWS, WEATHER FORECAST, STOCK INFORMATION, ETC  
 01: OLD DATA AUTO REFRESH ON WITH NEW DATA IN NEWS, WEATHER FORECAST, STOCK INFORMATION, ETC  
 10~11: RESERVED

REFRESH TIME UPDATED DATA REFRESH TIME (5 BYTES)

YEAR (14 BITS), MONTH (4 BITS), DAY (5 BITS)  
 HOUR (5 BITS), MINUTE (6 BITS), SECOND (6 BITS)

TIME MAP FLAG

00: WITHOUT TIME MAP  
 01: WITH TIME MAP  
 10~11: RESERVED

STORAGE BROADCAST FLAG

00: NORMAL BROADCAST STREAM  
 01: STORAGE BROADCAST STREAM  
 10~11: RESERVED

EXTRA BROADCAST FILE INFORMATION TABLE (EXT\_AVFIT)

EXT\_AVFIT INFORMATION

DATA BROADCAST RECORDING FILE ID FLAG (DATA BROADCAST RECORDING FILE ID FLAG)

ZERO TH BIT 0: DATA BROADCAST IS NOT INCLUDED IN HR\_EXTBC.DAT, 1: INCLUDED  
 FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN HR\_EXTBC.DAT, 1: INCLUDED  
 SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN HR\_EXTBC.DAT, 1: INCLUDED  
 THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN HR\_EXTBC.DAT, 1: INCLUDED  
 OTHER BIT: RESERVED

BROADCAST RELATED DATA RECORDING FILE ID FLAG (BROADCAST RELATED INFORMATION RECORDING FILE ID FLAG)

ZERO TH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN HR\_EXTBC.DAT, 1: INCLUDED  
 OTHER BIT: RESERVED

EXTRA STREAM INFORMATION #1 ~ EXTRA STREAM INFORMATION #n

EXT\_ATR

DATA BROADCAST ID FLAG (DATA BROADCAST ID FLAG)

ZERO TH BIT 0: DATA BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED  
 FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED  
 SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED  
 THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED  
 OTHER BIT: RESERVED

FIG. 12B

BROADCAST RELATED DATA ID FLAG (BROADCAST RELATED INFORMATION ID FLAG)  
 ZERO TH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN EXTRA STREAM,  
 1: INCLUDE  
 OTHER BIT: RESERVED

BROADCAST RELATED DATA CONTENT (BROADCAST RELATED INFORMATION CONTENT)  
 00: BROADCAST RELATED INFORMATION IS INTERNET DATA (STREAMING)  
 10~11: RESERVED

COPY MOVE INFORMATION (COPY MOVE INFORMATION)  
 COPY MOVE FLAG (COPY OR MOVE)  
 000: ORIGINAL, 001: COPY, 010: MOVE, 011~111: OTHERS

SOURCE FILE INFORMATION (SOURCE FILE INFORMATION)  
 00: NO SOURCE EXISTS, 01: SOURCE EXISTS IN HR\_STRMx.SRO,  
 10: SOURCE EXISTS IN HR\_EXTBC.DAT, 10~11: RESERVED

SOURCE STREAM NAME: SOURCE STREAM NAME

SOURCE STREAM NUMBER: SOURCE STREAM NUMBER

BROADCAST VIDEO MODE  
 000: MPEG-2, 001: MPEG-1, 010: MPEG-4, 011: H.264, 100: WM9  
 101~111: RESERVED

BROADCAST AUDIO MODE  
 000: MPEG-2 AAC, 001: Dolby AC-3, 010: MPEG-1, 011: MPEG-2 BC  
 100: DTS, 101: LPCM, 110~111: RESERVED

BROADCAST STILL-PICTURE MODE  
 000: JPEG, 001: PNG, 110~111: RESERVED

BROADCAST ANIMATION MODE  
 000: MNG, 001~111: RESERVED

DATA BROADCAST MODE  
 000: BML, 001~111: RESERVED

DATA TRANSMISSION MODE  
 00: DATA CARROUSEL MODE  
 01: EVENT MESSAGE TRANSMISSION MODE  
 10: TRANSMISSION MODE INCLUDING BOTH MODES  
 11: RESERVED

DATA CARROUSEL AUTO RENEWAL  
 00: BROADCAST DATA CARROUSEL ALL DATA RECORDING MODE  
 01: SELECTED RECORDING MODE FOR RENEWAL DATA IN BROADCAST DATA CARROUSEL  
 10~11: RESERVED

REFRESH FLAG  
 00: OLD DATA AUTO REFRESH OFF WITH NEW DATA IN NEWS, WEATHER FORECAST,  
 STOCK INFORMATION, ETC  
 01: OLD DATA AUTO REFRESH ON WITH NEW DATA IN NEWS, WEATHER FORECAST,  
 STOCK INFORMATION, ETC  
 10~11: RESERVED

FIG. 12C

REFRESH TIME

UPDATED DATA REFRESH TIME (5 BYTES)

YEAR (14 BITS), MONTH (4 BITS), DAY (5 BITS)

HOURL (5 BITS), MINUTE (6 BITS), SECOND (6 BITS)

TIME MAP FLAG

00: WITHOUT TIME MAP

01: WITH TIME MAP

10~11 : RESERVED

STORAGE BROADCAST FLAG

00: NORMAL BROADCAST STREAM

01: STORAGE BROADCAST STREAM

10~11 : RESERVED

HR\_STMAP.IFO

TIME MAP TABLE FOR 1PMT PARTIAL TS

1STREF\_SZ : SOBU FIRST REFERENCE PICTURE SIZE

DATABC\_PB\_TM : SOBU REPRODUCTION TIME (THE NUMBER OF VIDEO FIELDS)

DATABC\_SZ : SOBU SIZE (THE NUMBER OF SECTORS)

HR\_STRMx.SRO

NORMAL BROADCAST, PROGRAM LINKED DATA BROADCAST, INDEPENDENT

DATA BROADCAST, INDEPENDENT AUDIO BROADCAST STREAM

HR\_EXTBC.DAT

DATA BROADCAST DIRECT RECORDING, DATA FILE OBTAINED BY COPYING

OR MOVING PART OF DATA, OR OTHER STREAM

FIG. 12D